

Date: Wednesday, 2/15/2006 3:50:51 PM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: FOLDING STEP WELDMENT LH
Job Number	: 25873		
Estimate Number	: 10463		
P.O. Number	: N/A	Part Number	: D3388041
This Issue	: 2/15/2006 S.O. No. : N/A	Drawing Number	: D3388 REV A
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : LARGE FAB ASSY	Drawing Revision	: A
Previous Run	: 24142	Material	: N/A
Written By	: <u>See COMMENT Below</u>	Due Date	: 3/10/2006
Checked & Approved By	: <u>RA 06.02.16</u>	Qty:	4 Um: Each
Comment	: Est. B 05.06.10 Added Step 11 KJ/JLM		

Additional Product

SAKYD 09

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D2622120C	Extrusion
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)
 D2622-120C extrusion 8
 Batch: 324092

RA 06.03.13 4

2.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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Comment: LARGE FABRICATION RESOURCE 1
 1-Cut D2622-120C extrusion 85.15" long as per Dwg D3388
 2-Deburr and bevel ends for welding

RA 06.03.13 4
RA 06.03.13 4

3.0	D2734	206 Step Endplate
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Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)
 206 Step Endplate
 Pick:

Qty	Part Number	Description	Batch
2	D2734	End Cap	<u>324402</u>

RA 06.03.13 4

4.0	D33871	Arm
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Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)
 Arm
 Pick:

Qty	Part Number	Description	Batch
2	D3387-1	Arm	<u>324119</u>

RA 06.03.13 4

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 2/15/2006 3:50:52 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FOLDING STEP WELDMENT LH

Job Number: 25873

Part Number: D3388041

Job Number:



Seq. #:	Machine Or Operation:	Description :
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5.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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Comment: LARGE FABRICATION RESOURCE 1

Weld arms and end caps as per Dwg D3388.

Inspect for foreign objects as per QSI 024. Dwg Rev: *A*

Grind end cap welds flush

PE 06-03-14
PE 06-03-16

P10
4
4

6.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

FC 06 03 24

See Back

7.0	POWDER COATING	POWDER COATING
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Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

a.m 06-04-07

8.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3388 and QSI 005 4.4

DL 06/04/07 (4)

9.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
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Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Inspect Powder Coat and Wing Walk

MM 06 03 07 (4)

10.0	D2808	Spacer
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Spacer

Pick:

Qty	Part Number	Description	Batch
1	D2808	Spacer	<i>B25 248</i>

B25 248

SAD 06:04:09 (4)

11.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1

Press spacer into D3387-1 arm as per Dwg D3387

SAD 06:04:09 (4)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
06-03-16	5	Add QC 5/9 Permanent change	QC 5 QC 9	06-03-16 06-03-22 (A)		AB Person	2 06-03-16	
	6b.	weld end caps as per dwg and grind flush Q51 004	LE	06-03-29	4			
	6c.	QC 9/5 inspect welds and for foreign objects.	DD	06-04-03	4			
	6d.	chemical conversion and powder coat	LM	06-04-07	4			
	6e.	QC 3 inspect powder coat						

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes (No) DQA: Date: 06/04/29
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06-03-13	5	During welding the arms on the step grounded out in the middle and blew a hole in the step. Root cause: The step was lifted a little and a gap between the step and the grounding arm causing an arc.	AB 06-03-13	Cut off D3387-041 arm from step. Scrap and replace step. Grind step arm s flush and re-weld. See attached e-mail.	JE 06-03-16	2 06-03-16	AB 06-03-13	2 06-03-13

NOTE: Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FOLDING STEP WELDMENT LH

Job Number: 25873

Part Number: D3388041

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

EC 06.04.21

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

EC 06.04.21

14.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

DP 06/04/24 (4)

Job Completion



EC 06.04.24

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

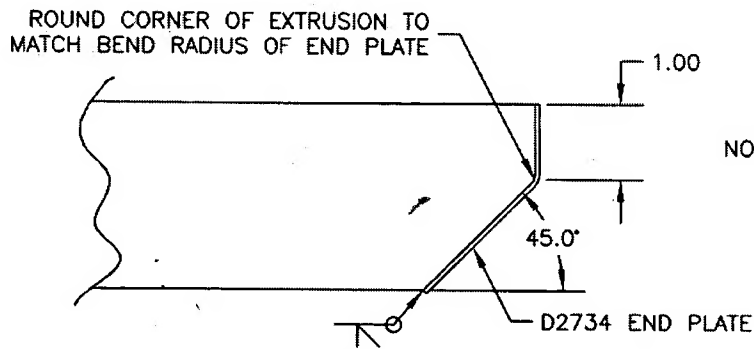
NOTE: Date & initial all entries

DART

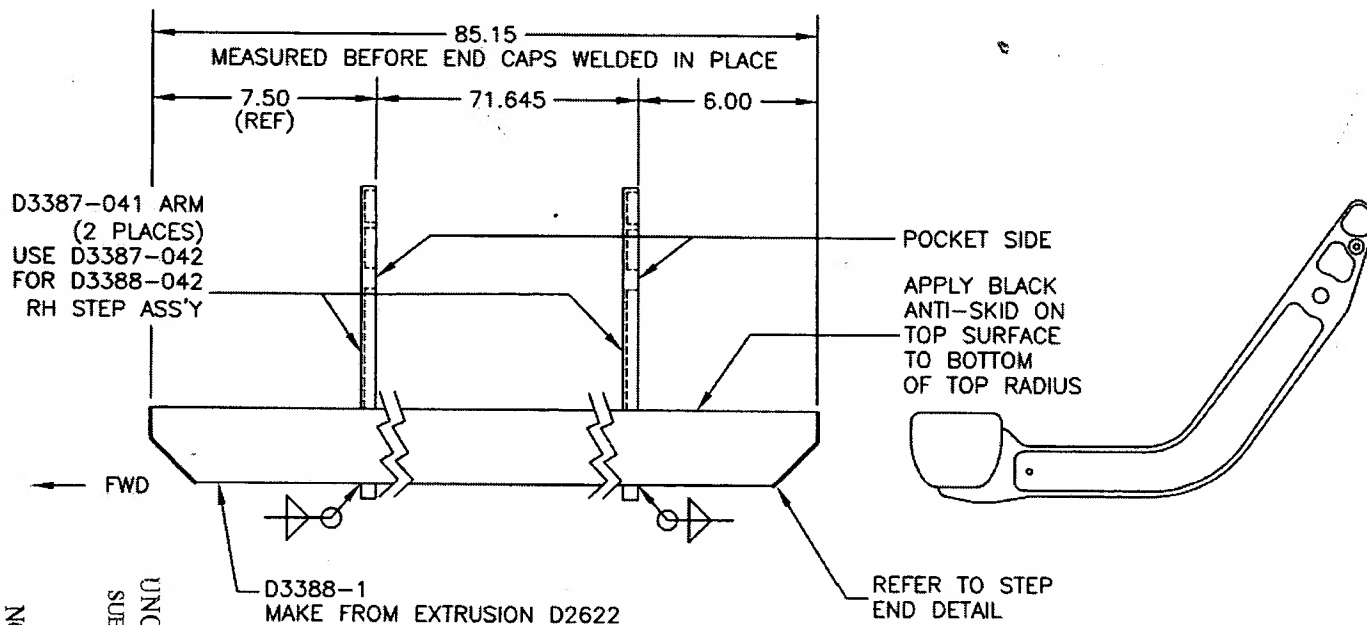
RELEASED

05.03.11

NOTE: ALL WELDS SHALL BE 100% VISUALLY INSPECTED BY A QUALIFIED INSPECTOR PER DART QSI 004



TYPICAL STEP END DETAIL
NOT TO SCALE



D3388-041 LH STEP ASSEMBLY (SHOWN)
D3388-042 RH STEP ASSEMBLY (OPPOSITE)

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
WELD PER DART QSI 004 UNLESS OTHERWISE NOTED

FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

POWDER COAT ENTIRE ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6)
OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4

DESIGN	DRAWN BY	DART AEROSPACE LTD
05.01.20	05.01.20	NEW ISSUE
CHECKED	APPROVED	DRAWING NO. D3388
DATE	TITLE	STEP WELDMENT
05.01.20	SCALE	NTS

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 25873

Jason Murdoch

From: David Shepherd [davids@dartaero.com]
Sent: March 13, 2006 11:16 PM
To: Jason Murdoch
Cc: Chris Provencal
Subject: Re: d3388-041

This is an acceptable repair.

----- Original Message -----

From: Jason Murdoch
To: davids@dartaero.com
Sent: Monday, March 13, 2006 9:10 AM
Subject: d3388-041

Hi david

During the welding of a step the ground blew a hole in the middle of the extrusion. 1 d3387 arm is welded in place, t 2nd is only half welded, is it possible to cut the arms off and grind the welds off flush, and re-weld onto another step. We have done this once before with your approval.

jmurdoch@dartaero.com

Q.C. Inspector

4/24/2006